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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/801,337 | 03/15/2004 | Toshimasa Akagi | 04174 /LH | 1935 |
| 1933 | 7590 | 03/14/2006 | EXAMINER | |
| FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 Fifth Avenue 16TH Floor NEW YORK, NY 10001-7708 | | | PATEL, VISHAL A | |
| | | ART UNIT | | PAPER NUMBER |
| | | 3673 | | |

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/801,337 | AKAGI ET AL. | |
| | Examiner | Art Unit | |
| | Vishal Patel | 3673 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 December 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) 4-8 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/15/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species I, Claims 1-3 in the reply filed on 12/14/05 is acknowledged. Claims 4-8 are withdrawn. This election is made final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (US. 3,738,669).

Anderson discloses a waterproof structure having a waterproof member that is interposed between a first member (housing that contains the shaft) and a second member (shaft). The waterproof member (10) is a pipe (the seal 10 is an annular member) that is formed from a material with elasticity and anti-permeation properties (elastomeric material), terminal end faces (26 and 28) of the pipe are disposed to be opposed to each other with their centers being aligned.

The waterproof member is formed of rubber or a resin, and the waterproof member has one of a perfect circular shape (the waterproof member is a pipe), a rectangular shape, a polygonal shape and an oval shape.

The first and second member are engaged or attached to each other, whereby the terminal end faces of the pipe are brought into close contact with each other and waterproofing is effected

(method limitations given little patentable weight in an apparatus claim, but the ends are out of contact and then brought in contact).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panayides et al (US. 6,401,398) in view of Atusmi et al (US. 6,161,878).

Panayides discloses a waterproof structure having a first member (door 26) and a second member (helicopter body), the first member having a groove (groove in the door that has a flat surface 25 of a waterproof member), the second having a projection (45) that contacts a waterproof member (18), the waterproof member is a pipe having a perfect circular shape or a rectangular shape or a polygonal shape or an oval shape (the waterproof member has a shape that is the peripheral shape of the door) and the waterproof member is in the groove.

The first and second member are engaged or attached to each other, whereby the terminal end faces of the pipe are brought into close contact with each other and waterproofing is effected (method limitations given little patentable weight in an apparatus claim). When an outer peripheral surface of the pipe is pressed by engagement between the first and second members, whereby the terminal end faces of the pipe are brought into close contact with each other (method limitations given little patentable weight in an apparatus claim).

Panayides discloses the invention substantially as claimed above but fails to disclose that the waterproof structure having terminal ends (meaning that the seal is split ring seal). Atsumi discloses a structure having a first member being assembled to a second member, the first member having a seal (4) that is a split seal and is contracted by fastener that fasten the first and second members together and the split seal is capable of being deformed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure that the waterproof structure of Panayides to have a split as taught by Atsumi, to provide deformation of the waterproof structure (column 6, line 31 of Atsumi) and prevent kinking (this is the case due to the inherent tolerance provided by the split in the waterproof structure). Furthermore providing a split in a member make the installation of the member easier.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peale and Wilkie, Jr. et al teach to have the ring with segments to provide easy installation, Peterson, Ditcher teaches to have a solid seal member or a hollow seal member, Taylor teaches a hollow seal having a split, figure 3), Allison and Carr et al teaches to have split in a seal member to prevent adverse claiming forces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
March 3, 2006

A handwritten signature consisting of two parts. The first part, "Vishal", is written in a cursive script. The second part, "Patel", is written in a larger, bolder, stylized script.

Vishal Patel
Patent Examiner
Tech. Center 3600